Cc: Juan_Somoano@oxy.com[Juan_Somoano@oxy.com]; Clifford

Firstenberg[cfirstenberg@tierrasolutionsinc.com]; Enrique Castro[ecastro@tierrasolutionsinc.com]

To: Carlie Thompson[cthompson@tierrasolutionsinc.com]

From: Naranjo, Eugenia

Sent: Thur 4/6/2017 9:15:11 PM

Subject: Re: NBSA Phase III Sample Re-analysis

Thank you Carlie. You can submit the data as it becomes available (April 21) and the CSM by July 27. Thanks,

eugenia

From: Carlie Thompson <cthompson@tierrasolutionsinc.com>

Sent: Thursday, April 6, 2017 4:01 PM

To: Naranjo, Eugenia

Cc: Juan_Somoano@oxy.com; Clifford Firstenberg; Enrique Castro

Subject: RE: NBSA Phase III Sample Re-analysis

Eugenia,

The re-analysis of the PCB congeners has started and is progressing well. Eurofins has committed to completing the analyses by early May. Based on this schedule, we expect to have validated results to you by May 31. As discussed, Eurofins had mentioned they were concerned that there was a possibility of limited sample volume, but they have not run into that issue yet. We will let you know if it comes up or if Eurofins encounters any other problems during the reanalysis. If you'd like to receive the rest of the data earlier, we can provide it by April 21. The Phase III data is also linked to other tasks, including the CSM. If the Phase III data submittal is changed to May 31, the current schedule durations would result in the submittal of the CSM on August 24. Given that much of the data will be available earlier, we are proposing to submit the CSM Update by July 27. Please let me know if you would like to discuss this revised proposed schedule.

Thanks,

Carlie

From: Naranjo, Eugenia [mailto:Naranjo.Eugenia@epa.gov]

Sent: Wednesday, April 05, 2017 11:06 AM

To: Carlie Thompson <cthompson@tierrasolutionsinc.com>

Cc: Juan Somoano@oxy.com; Clifford Firstenberg <cfirstenberg@tierrasolutionsinc.com>;

Enrique Castro <ecastro@tierrasolutionsinc.com>

Subject: RE: NBSA Phase III Sample Re-analysis
Carlie,
Do you have an update regarding the schedule for re-analysis? Thanks,
eugenia
From: Carlie Thompson [mailto:cthompson@tierrasolutionsinc.com] Sent: Wednesday, March 22, 2017 1:58 PM To: Naranjo, Eugenia < Naranjo. Eugenia@epa.gov > Cc: Juan Somoano@oxy.com; Clifford Firstenberg < cfirstenberg@tierrasolutionsinc.com >; Enrique Castro < ecastro@tierrasolutionsinc.com > Subject: RE: NBSA Phase III Sample Re-analysis
Eugenia,
We will work with Eurofins to get started on the re-analysis and try to get a schedule to you next week.
Thanks,
Carlie
From: Naranjo, Eugenia [mailto:Naranjo.Eugenia@epa.gov] Sent: Tuesday, March 21, 2017 7:59 PM To: Clifford Firstenberg < <u>cfirstenberg@tierrasolutionsinc.com</u> >; Carlie Thompson< <u>cthompson@tierrasolutionsinc.com</u> > Cc: <u>Juan Somoano@oxy.com</u> Subject: NBSA Phase III Sample Re-analysis
Cliff,

There are two issues stemming from your February 3 email regarding data quality / data usability for PCB Congeners (Method 1613) from the Phase III surface sediment samples:

Issue No. 1: Tierra's SQT QAPP Worksheet No. 36 states that PCB validation will follow a Tierra in-house validation SOP ("EDS SOP: Congener PCB, Rev. 3, 7/10" developed by Diane Waldschmidt of Environmental Data Services). Tierra is requesting a QAPP Amendment to change the validation procedure to instead follow the USEPA Region II SOP for PCB congeners (SOP HW-46, Revision 1, dated September 2008 "Standard Operating Procedures for EPA Method 1668"), because the Tierra validation SOP has an unnecessarily tight acceptance criterion for the PCB retention time, which will cause data rejection. Since there is no technical basis for this tighter acceptance criterion, we agree that Tierra should submit a QAPP Amendment and validate the Phase III data according to USEPA validation SOP HW-46.

Issue No. 2: Tierra's subcontract laboratory analyzed a large sample mass (10 grams) and opted not to implement GPC cleanup (per Method 1668 Section 12.7) for the Phase III sediment sample PCB analyses. Because of this decision, the Phase III sediment sample analytical results were impacted by matrix interference and a retention time shift. Tierra acknowledged during the conference call on 15 March 2017 that these two issues are resolved if the laboratory analyzes a 1 gram samples and implements the extract cleanup per the method. Tierra presented two options for response: (1) Use the data from the 10 gram samples and re-validate using the EPA validation guidance or (2) reanalyze the Phase III samples with GPC cleanup and a smaller sample mass and then validate using EPA validation guidance. The USEPA has decided that Tierra should reanalyze the Phase III sediment samples to resolve known quality issues (using 1 gram sample size with extract cleanup) to yield the highest quality PCB Congener dataset, given the amount of resources put into the planning and execution of Phase III sediment collection.

Thanks,

Eugenia Naranjo

United States Environmental Protection Agency

290 Broadway, New York, NY 10007

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